GAL'TSOV, A.P.; CHAPLYGINA, A.S.

Symposium on atmospheric processes on a global scale. Izv. AN SSSR Ser. geog. no.4:158-162 '64 (MIRA 17:8)

GAL'TSOV, D.V.; ZHUKOVSKIY, V.Ch.

Use of the Wentzel-Kramers-Brillouin method in calculations with an accuracy to high degrees of h. Vest. Mosk. un. Ser.3: Fiz., astron. 19 no.5:50-53 S-O '64. (MIRA 17:12)

1. Kafedra teoreticheskoy fiziki Moskovskogo universiteta.

L 48125-65 EWT(m)/EWA(m)-2 Peb
ACCESSION NR: AP5011220 UR/0367/65/001/003/0507/0510

AUTHOR: Sokolov, A. A.; Ivanov, Yu. P.; Gal'tsov, D. V.

TITLE: Effect of spins on the annihilation and production of electron-positron pairs in weak interactions

SOURCE: Yadernaya fizika, v. 1, no. 3, 1965, 507-510

TOPIC TAGS: pair production, weak interaction regime, positron, electron spin, annihilation reaction

ABSTRACT: The effect of electron and positron spin orientations on their annihilation due to weak interaction is studied. The theory of the four component neutrino is used to study the reactions $e^- + e^+ \to \nu + \bar{\nu}$ The Hamiltonian for the $e^- + e^+ \to \nu + \bar{\nu}$ process in the case of the V-A interaction is given, and the total effective cross section is found for the case of solely longitudinal polarization of the pair e^-, e^+. From this it follows that for any energies either electron-neutrino or muon-neutrino pairs may form. It is found that the total effective cross section of e^- and e^+ annihilation with opposite helicity is twice as large as for particles with

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L 48125-65

ACCESSION NR: AP5011220

identical helicity. For $E \sim 1000$ Gev the cross sections for annihilation in the weak interaction description and in the electromagnetic are approximately the same.

$$\frac{\sigma}{\bar{\sigma}} \sim G^2 \frac{E^2}{m_0 r_0^3 c^6 \hbar^4} \quad \text{where} \quad r_0 = \frac{e^2}{m_0 c^2}.$$

Also studied is the polarization property of the electrons and positrons produced in the reaction: $\nu + \bar{\nu} \to e^- + e^+$. A cross section is derived. It can be shown that the case in question leads to parallel spins for the electrons, with antiparallel momenta. In the case considered, the spins of the neutrino and antineutrino will also be parallel.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 10Jul64 ENCL: 00 SUB CODE: NP

NO REF SOV: 005 OTHER: 006

Card 2/2

GAL'TSOV, N.

Encouraging results. Okhr.truda i sots.strakh. no.1:84-85 Ja '59. (MIRA 12:2)

1. Predsedatel' Udmurtskogo oblsovprofa, g.Izhevsk.
(Udmurt A.S.S.R.--Industrial hygiene)

ACCESSION NR: AT4041484 S/2535/64/000/157/0091/0096

AUTHOR: Gal'tsov, O. D. (Candidate of technical sciences)

TITLE: The distribution of discharge rates between the stages of a centrifugal injection nozzle of a gas turbine engine

SOURCE: Moscow. Aviatsionny*y institut. Trudy*, no. 157, 1964. Issledovaniya rabochego protsessa v kamerakh sgoraniya gazoturbinny*kh dvigateley (Studying the working processes of gas turbine engine combustion chambers), 91-96

TOPIC TAGS: gas turbine, swirlatomizer, aviation turbine, jet aircraft, fuel injection nozzle, injection nozzle, combustion chamber, two stage injection nozzle, fuel injection

ABSTRACT: An analysis has been made of the discharge characteristics of a two-stage aviation-turbine swirlatomizer consisting of two concentric nozzles equipped with tangential flow channels for imparting a swirling motion. The discharge characteristics are discussed in terms of the parameter

$$\mu_r = \frac{\rho_{r1}}{\rho_{r2}}.$$

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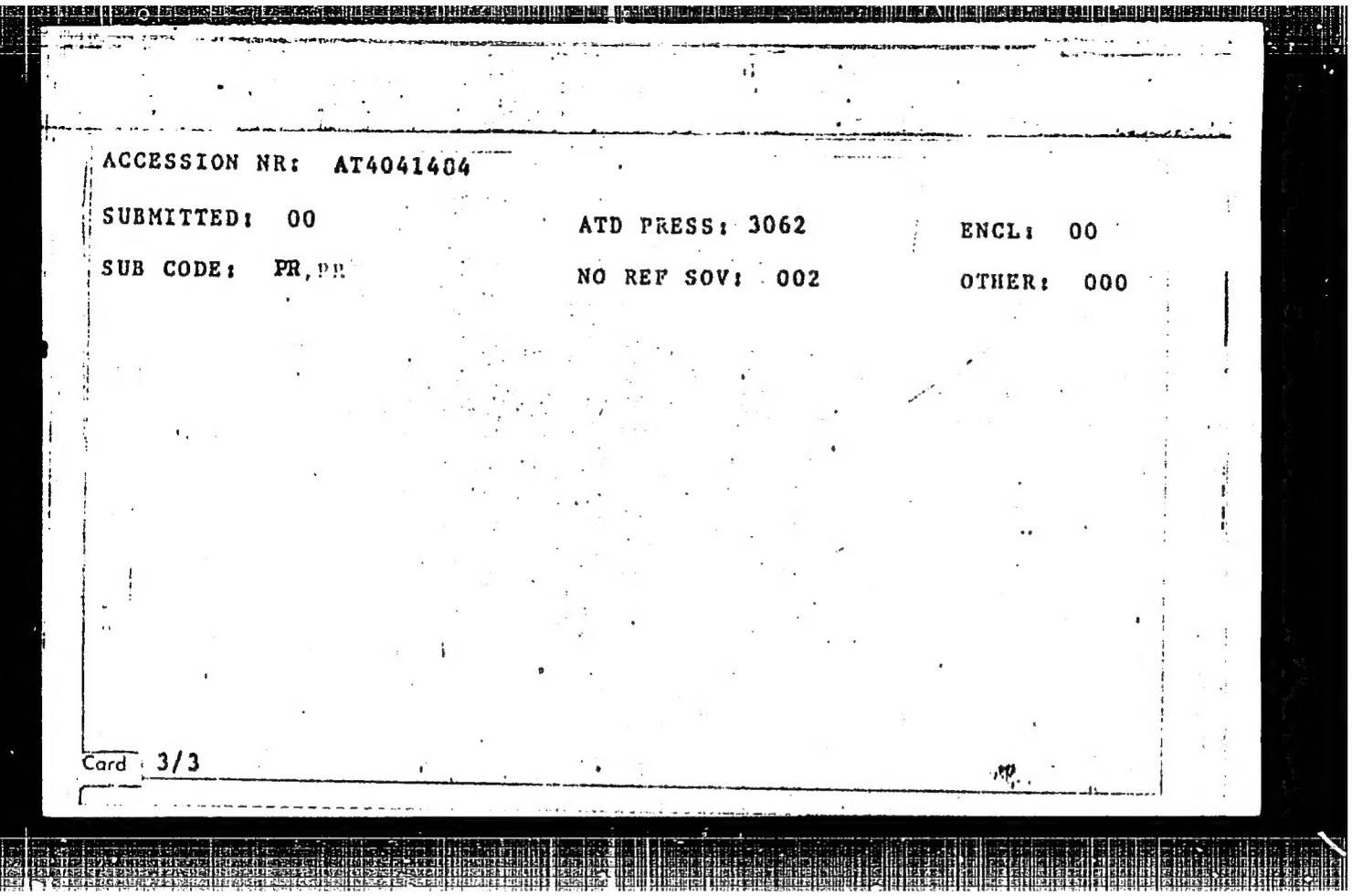
ACCESSION NR: AT4041484

where p_{T1} is the injection pressure when the first stage is used and p_{T2}, when both the first and second stages are used for injecting the same amount of fuel. Formulas for the maximum and minimum fuel injection rates were derived. It is shown that the minimum fuel injection rate for easy starting should be 10% of the maximum rate, in which case ε_T should amount to 7.2 (at minimum and maximum injection pressures of 5 and 70 atm, respectively). At $\varepsilon_T = 10$, the maximum injection pressure can be lowered to 35 atm. The value of ε_T should increase as the service ceiling of the engine increases. Nozzles with ε_T ranging from 7 to 50 may be used. A further increase in ε_T is limited by design considerations and by the fact that at high ε_T, the atomization deteriorates at the onset of operation of the second stage and fuel injection during transient regimes becomes less uniform. When ε_T is appropriately selected, good atomization under all operating regimes is achieved, reliability increases, and the maximum injection pressure may be lowered. Orig. art. has: 4 figures and 11 formulas.

ASSOCIATION: Moskovskiy aviatsionnyy institut (Moscow Aviation Institute)

Card 2/3



ACCESSION NR: AT4041404

SUBMITTED: 00 ATD PRESS: 3062 ENCL: 00

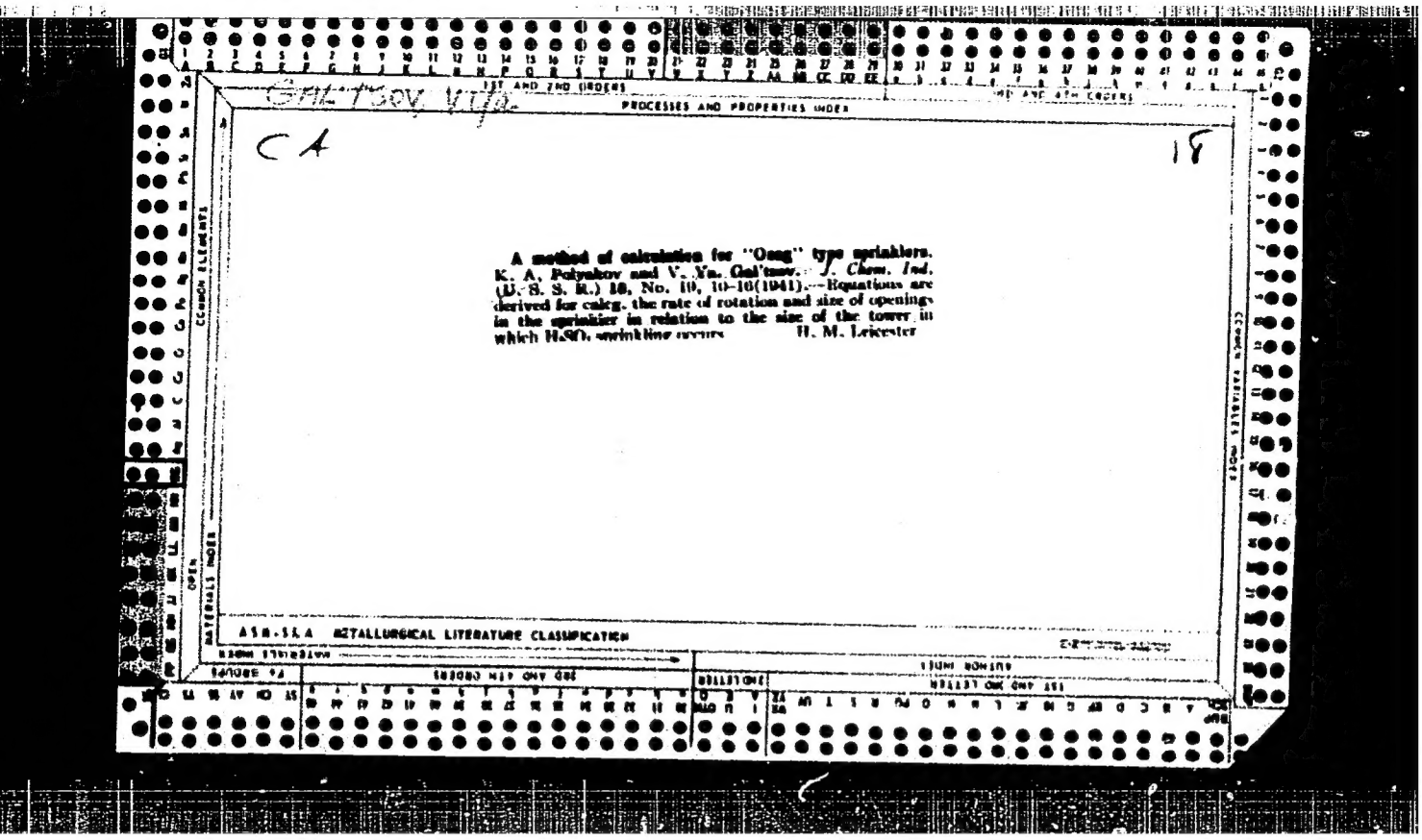
SUB CODE: PR, PH NO REF SOV: 002 OTHER: 000

Card 3/3

GRISHCHENKO, P.A.; PRYAKHIN, I.P.; GAL'TSOV, V.I.

Differentiated cultivation practices on virgin lands. Zemledelie 4 no.5:117-119 My '56. (MLRA 9:8)

1. Altayskiy sovkhoz, Kustanayskaya oblast'.
(Kazakhstan--Agriculture)



CA 15

A method of calculation for "Oeng" type sprinklers. K. A. Polyakov and V. Ya. Gal'tsov. *J. Chem. Ind.* (U. S. S. R.) 18, No. 10, 10–16(1941).—Equations are derived for calcg. the rate of rotation and size of openings in the sprinkler in relation to the size of the tower in which H$_2$O sprinkling occurs. H. M. Leicester

S/064/61/000/012/007/002
B103/B110

AUTHORS: Margulis, M. ..., Gal'tsov, V. Ya, Candidate of Technical Sciences

TITLE: Intensification of some stages of polyolefin production

PERIODICAL: Khimicheskaya promyshlennost', no. 12, 1961, 15 - 17

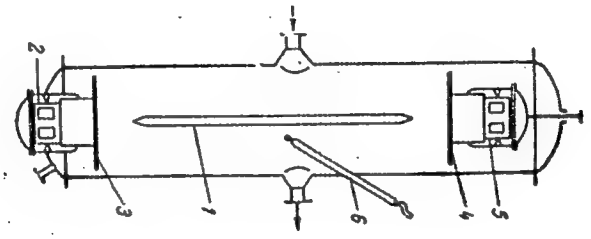
TEXT: A description is given of: (a) the ultrasonic crushing of stereospecific $Al(C_2H_5)_3/TiCl_3$ catalysts dissolved in saturated hydrocarbons (Fig. 1); (b) extraction of the catalysts from the polymer with the same apparatus but without partition wall; and (c) a press for pressing off the polymer (Fig. 4). The catalyst was extracted from polypropylene by means of oscillations of 21.3 kc/sec at 30°C or of 1 Mc/sec and an intensity of 5 w/cm^2 at 40°C. Extraction was found to be accelerated as the sound intensity increased. 30 - 45 min is sufficient for purification. A residual content of solvent (heptane-alcohol mixture) of 15% and less in the polymer can be reached with a screw-press. Application of ultrasonics

Card 1/3

Intensification of some stages...

for continuous rinsing of the polymer, and pressing off to a 15% moisture content reduces the ash content in the polymer to 0.042 during a single rinsing (modulus of dissolution = 6). An alcohol addition of 5% of the total reaction mass is sufficient. Drying may be reduced to 0.18 through low moisture of the polymer. Polymers with an ash content of $<0.1\%$ can be produced by this method. K. S. Minker and E. G. Ruter are mentioned. There are 4 figures and 5 references: 4 Soviet and 1 non-Soviet.

Fig. 1



Card 2/3

Intensification of some stages...

Fig. 1. Crushing apparatus. Legend: (1) partition wall; (2) stationary and (5) adjustable vibrators; (3) and (4) radiating plates; (6) piezoelectric pickup. Apparatus is tilted by 12° to facilitate removal of cavitation bubbles from radiating plates.

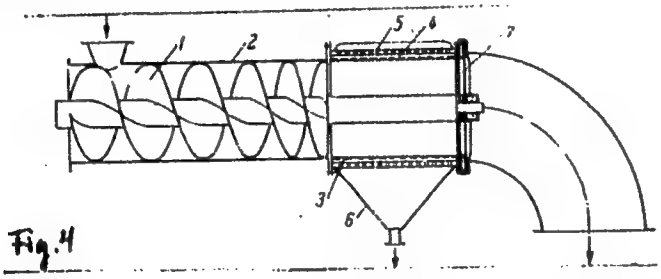


Fig. 4

Fig. 4. Screw press. Legend: (1) double screw; (2) cylinder; (3) metal fabric; (4) screen; (5) filter drum; (6) collector for liquid; (7) exchangeable partition wall.

Card 3/3

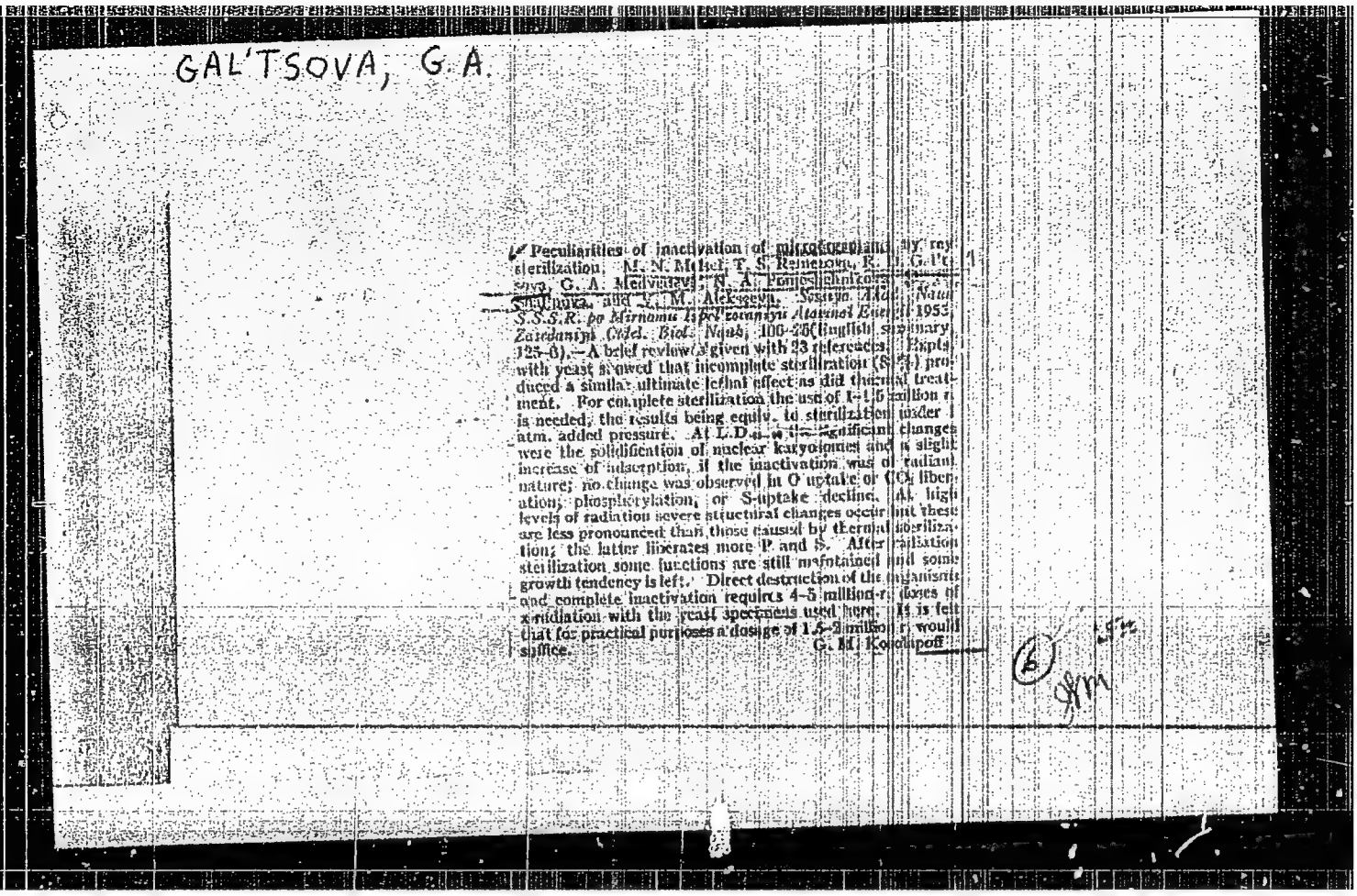
MARGULIS, M.A.; GAL'TSOV, V.Ya., kand.tekhn.nauk

Intensifying some stages of the manufacture of polyolefins. Khim. prom. no.12:837-839 D '61. (MIRA 15:1)
(Olefins)

GAL'TSOVA, A. P.

"Study of Laws Covering the World Distribution of Precipitation in Connection with the Genetic Classification of Climates."

report to be submitted for the Intl. Geographical Union, 10th General Assembly and 19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.



GAL'TSOVA, G. A.

Peculiarities of inactivation of microorganisms by x-ray sterilization. M. N. Meisel, T. S. Remeeva, E. I. G'tsova, G. A. Medvedeva, N. A. Fomina, Shtukova, and Z. M. Alekseeva. *Sessiya Akad. Nauk S.S.S.R. po Mirnomu Ispol'zovaniyu Atomnoi Energii* 1955, *Zasedaniya Otdel. Biol. Nauk*, 100-25 (English summary 125-6).—A brief review is given with 23 references. Exptl. with yeast showed that incomplete sterilization (S 99%) produced a similar ultimate lethal effect as did thermal treatment. For complete sterilization the use of 1-1.5 million r is needed, the results being equiv. to sterilization under 1 atm. added pressure. At L.D.$_{50}$ no significant changes were the solidification of nuclear karyokinnet and a slight increase of adsorption, if the inactivation was of radiant nature; no change was observed in O uptake or CO_2 liberation; phosphorylation, or S-uptake decline. At high levels of radiation severe structural changes occur but these are less pronounced than those caused by thermal sterilization; the latter liberates more P and S. After radiation sterilization some functions are still maintained and some growth tendency is left. Direct destruction of the organisms and complete inactivation requires 4–5 million-r doses of x-radiation with the yeast specimens used here. It is felt that for practical purposes a dosage of 1.5–2 million r would suffice.

G. M. Kondopoff

(B) 9/m

GAL'TSOVA, M.N.

MODIFICATION IN STEROL METABOLISM OF YEAST ORGANISMS UNDER THE INFLUENCE OF X RAYS. R. D. Gal'tsova, M. N. Meisel, and L. A. Seliverstova (Institute of Microbiology, Academy of Science, U.S.S.R.). Doklady Akad. Nauk S.S.S.R. 99, 1013-16(1954) Oct. 21. (In Russian)

Data on the ergosterol content, respiration, and fermentative power of Saccharomyces cerevisiae cultures following exposure to 2000 to 100,000 r of 160-kv x rays are tabulated and discussed. (G.Y.)

GAL'TSOVA, N.YE.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor Fuels. Lubricants. I-13

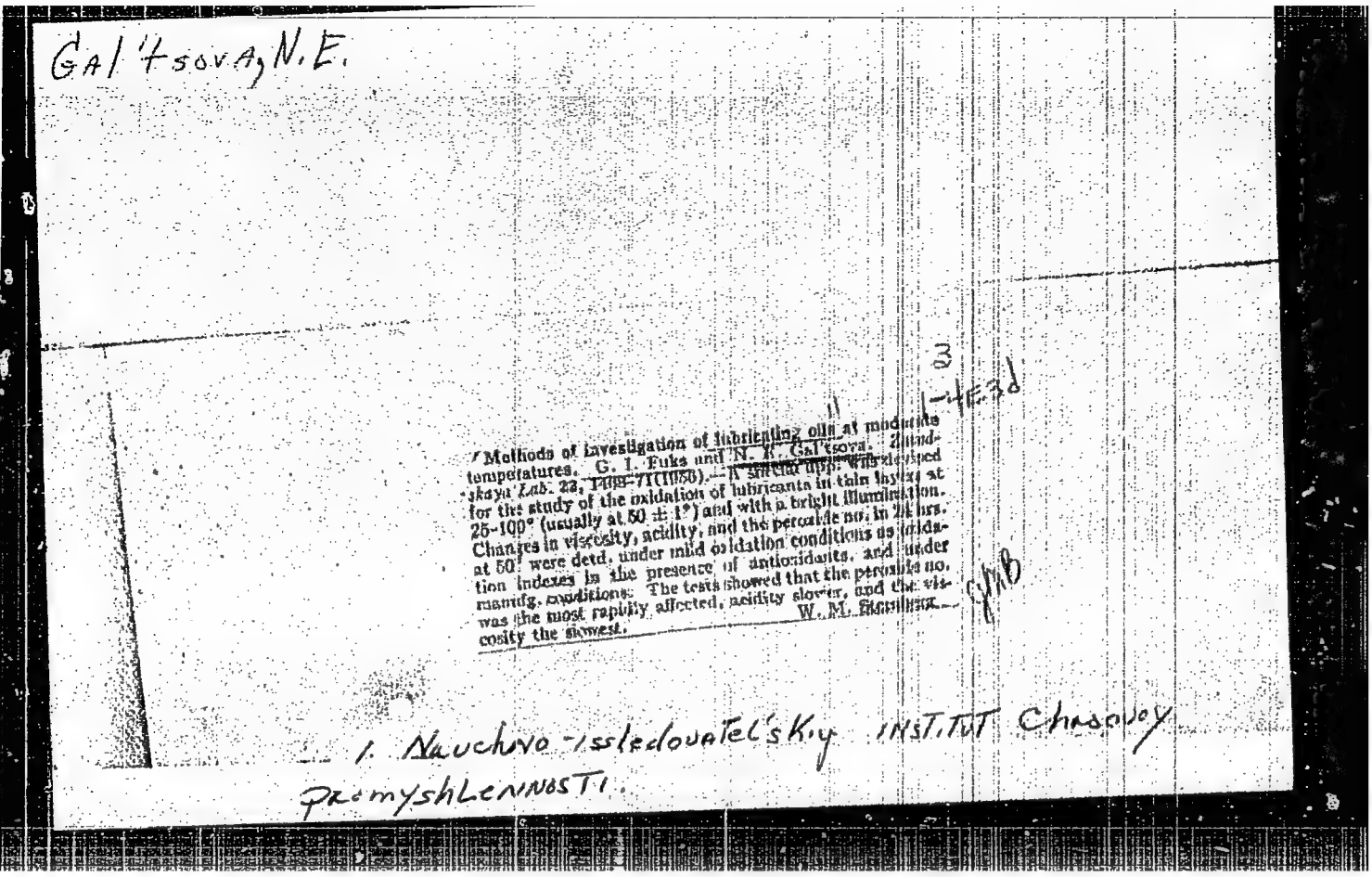
Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12975

Author : Fuks G.I., Gal'tsova N.Ye., Uss I.I.
Title : Low-Viscosity Watch Oils

Orig Pub : Chasovyye mekhanizmy, Sb. 1, M., Mashgiz, 1955, 165-185

Abstract : Preparation of low-viscosity oils for clockwork mechanisms, from oils of medium viscosity, can be effected by three methods: dilution with low viscosity synthetic components, removal of viscous components of fat by freezing or by adsorption separation (decrease in viscosity of bone oil, that is attained thereby, does not exceed 16%), chemical treatment of the oil involving ester interchange of fatty acid glycerides.
Bibliography, 28 references.

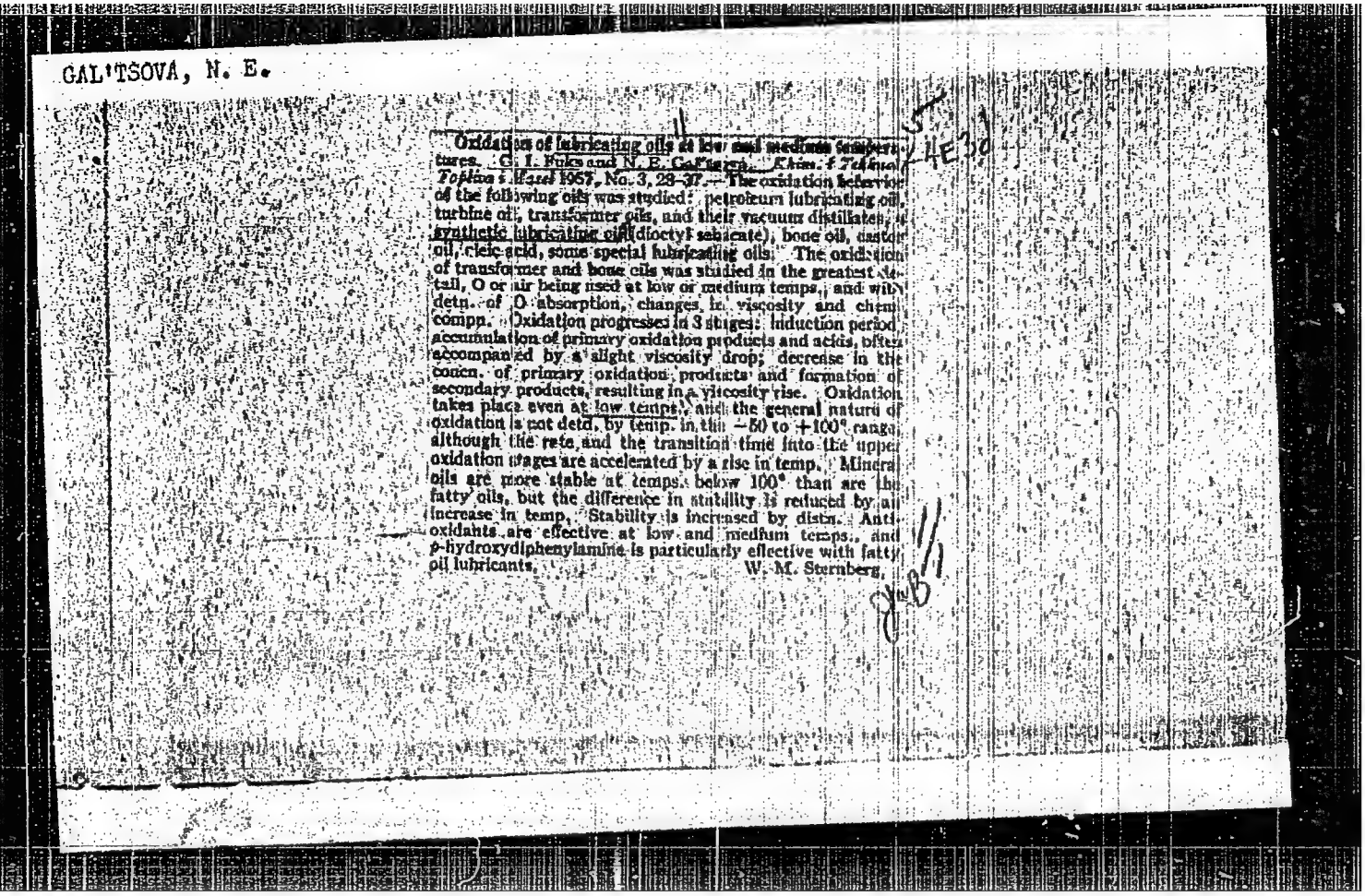
Card 1/1 - 260 -



GAL'tsova, N.E.

Methods of investigation of lubricating oils at moderate temperatures. G. I. Fuks and N. E. Gal'tsova. Zhurnal prikladnoi Khimii 23, 1149-71(1950).—A similar apparatus was developed for the study of the oxidation of lubricants in thin layers at 25-100° (usually at 50 ± 1°) and with a bright illumination. Changes in viscosity, acidity, and the peroxide no. in 24 hrs. at 50° were detd. under mild oxidation conditions as oxidation indexes in the presence of antioxidants, and under running conditions. The tests showed that the peroxide no. was the most rapidly affected, acidity slower, and the viscosity the slowest. W. M. Sternberg

1. Nauchno-issledovatel'skiy institut Chasovoy promyshlennosti.



GAL'TSOVA, N. E.

Oxidation of lubricating oils at low and medium temperatures. G. I. Fuks and N. E. Gal'tsova. *Khim. i Tekhnol. Topliva i Masel* 1957, No. 3, 28–37.—The oxidation behavior of the following oils was studied: petroleum lubricating oil, turbine oil, transformer oils, and their vacuum distillates, a synthetic lubricating oil (dioctyl sebacate), bone oil, castor oil, oleic acid, some special lubricating oils. The oxidation of transformer and bone oils was studied in the greatest detail, O or air being used at low or medium temps., and with detn. of O absorption, changes in viscosity and chem. compn. Oxidation progresses in 3 stages: induction period, accumulation of primary oxidation products and acids, often accompanied by a slight viscosity drop; decrease in the concn. of primary oxidation products and formation of secondary products, resulting in a viscosity rise. Oxidation takes place even at low temps., and the general nature of oxidation is not detd. by temp. in the −50 to +100° range, although the rate and the transition time into the upper oxidation stages are accelerated by a rise in temp. Mineral oils are more stable at temps. below 100° than are the fatty oils, but the difference in stability is reduced by an increase in temp. Stability is increased by distn. Antioxidants are effective at low and medium temps., and *p*-hydroxydiphenylamine is particularly effective with fatty oil lubricants.

W. M. Sternberg.

GHL'TSCVH, [illegible]. N+/E

PHASE I BOOK EXPLOITATION SOV/5055

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

Gidrodinamicheskaya teoriya smazki. Opory skol'zheniya. Smazka mazochnyye materialy (Hydrodynamic Theory of Lubrication. Lubrication and Lubricant Materials) Moscow, Mashgiz, 1959. 422 p. Errata slip inserted. 3,800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Otdeleniye tekhnicheskikh nauk SSSR.

Ed. for the Section "Hydrodynamic Theory of Lubrication": Ya. M. Gutman, Professor, Doctor of Technical Sciences; Resp. Ed. for the Section, "Lubrication and Slip Bearings": A. K. Dyachkov, Professor, Doctor of Technical Sciences; Resp. Ed. for the Section, "Lubricant Materials": G. V. Vinogradov, Professor, Doctor of Chemical Sciences; and Ed. of Publishing House: M. Ya. Kiebanov; Tech. Ed.: O. M. Gus'kova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in hydrodynamic theory of lubrication and [illegible]

SOV/5055

Hydrodynamic Theory (Cont.)

S/119/61/000/005/002/00?
D203/D306

AUTHOR: Gal'tsova, N.Ye.

TITLE: Tropical clock and instrument oils

PERIODICAL: Priborostroyeniye, no. 5, 1961, 27

TEXT: Tropical grade oils were developed in the Institute NIIChasprom satisfying the conditions of resistance to humidity, higher ambiant temperature and microorganisms. The latter condition was incorporated as a result of experiments carried out on this problem. 13 kinds of typical fungi and bacteria were cultured in the oils tested, and kept for 21 days at a thermostatically regulated temperature of 30 ± 1°. The resistance to microorganisms was assessed as follows: 0% was taken to indicate oils on which all the cultures thrived; 100% indicated the absence of any type of growth. When developing tropical grades of oils, apart from fungicide, the following aspects were also studied: Vaporization, corrosion effects adherence, fluid properties and lubrication characteristics. Fats

Card 1/3

S/119/61/000/005/002/002
D203/D306

Tropical clock and instrument oils

were used as a basis for the tropical oils which had the effect of improving lubricating, vaporization and fluid leakage qualities.

Table. Physico-Chemical Properties of the Tropical Oils and Those of a Sample Oil MBP-12.

Legend: 1 - Grade of oil; 2 - adherence in ccm 3 - at 20°; 4 - at 50°; 5 - change of properties of the oils with acidation according to GOST 7934-56; 6 - the index of acidity in mg KOH/g; 7 - before acidation; 8 - after acidation; 9 - the index of peroxide in % of the iodide; 10 - before acidation; 11 - after acidation;

Физико-химические свойства тропических масел и эталонного масла МБП-12

(1) Марка масла	(2) Вязкость в *сст* при 20° (3)	при 50° (4)	(5) Изменение свойств масел при окислении по ГОСТу 7934-56: Кислотное число, в *мг* KOH/*г* до окисления (6)	после окисления (7)	Перекисное число в % йода до окисления (8)	после окисления (9)	(10) Нарастание вязкости в %	(11) Растекаемость по ГОСТу 7934-56 в %	(12) Испаряемость по ГОСТу 7934-56 в %	(13) Микробиологическая устойчивость за 21 день в %
(14) МЧТ-3	75,82	24,58	0,23	0,20	0,13	0,19	0,14	0,20	0,12	100
(15) МЧТ-20	77,11	24,71	0,17	0,26	0,13	0,17	0,00	0,20	0,08	100
(16) МЧТ-30	70,61	23,07	0,12	0,17	0,13	0,23	0,00	0,26	0,03	100
(17) МБП-12	68,63	21,09	0,14	0,17	0,09	0,08	0,18	0,20	0,12	0,0
(18) МПТ-25	79,34	22,01	0,12	0,20	0,09	0,08	0,00	0,27	0,11	100

Card 2/3

S/119/61/000/005/002/002
D203/D306

Tropical clock and instrument oils

12 - the increase of adherence %; 13 - fluid property according to GOST 7934-56 in %; 14 - evaporation according to GOST 7934-56 in %; 15 - microbiological resistance during 21 days in %; 16 - MChT -3; 17 - MChT-20; 18 - MChT-30; 19 - MBP-12; 20 - MPT-25.

Oils of the grade MChT-3, MChT-20, MChT-30, MPT-25 are now standard oils for clocks and instruments in tropical conditions. Oils of the grade MChT-3, MChT-20 and MChT-30 are used for the lubrication of relays and similar apparatus. There is 1 table.

Card 3/3

L 46178-66 EWT(m)/T LJ

ACC NR: AP6030588 (A,N) SOURCE CODE: UR/0413/66/000/016/0073/0073

INVENTOR: Fuks, G. I.; Gal'tsova, N. Ye.

ORG: none

TITLE: Instrument oil! Class 23, No. 184996

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 73

TOPIC TAGS: instrument oil, silicone lubricant, antioxidant additive, LUBRICATING OIL

ABSTRACT: An Author Certificate has been issued for an instrument oil based on a silicone fluid formulated to include 40—60% polyethylsiloxane fluid, 60—40% isoamyl capryl adipate, 0.02—0.1% p-hydroxydiphenylamine or ionol antioxidant additive, and 0.03—0.05% stearic acid. [SM]

SUB CODE: 11/ SUBM DATE: 27May63/

Card 1/1 mjs UDC: 621.892.091

GAL'TSOVA, R. D.

USSR.

Synthesis of amino nitrogen from ammonia and α-keto acids in the silk gland of silkworm. R. D. Gal'tsova and S. Ya. Demyanovskii. *Uchenye Zapiski Moskov. Gosud. Pedagog. Inst.* 77, No. 7, 25-32(1953); *Referat. Zhur. Khim.* 1954, No. 16558.—In the silk gland of oak silkworm caterpillar pyruvic or oxaloacetic acid and $(NH_4)_2CO_3$ combined to form α-amino-acid N in quantities of 60–120 micromoles per g. of silk fiber. As the cocoon is being wound the synthesis is being lowered and reaches a min. in the chrysalis. Acetic acid is not a substrate for amination but its addn. to pyruvic acid increases the α-amino acid synthesis by 26–50 micromoles per g. of silk fiber. Glucose has no effect on the process. Amination of pyruvic and oxaloacetic acids takes place also in the silk gland of the mulberry silkworm caterpillar in which case 90–140 micromoles per g. of silk fiber is formed.

M. Hosch

USSR/Biology - Biochemistry

Card 1/1 : Pub. 22 - 35/44

Authors : Gal'tsova, R. D.; Meysel', M. N.; and Seliverstova, L. A.

Title : Change in sterol metabolism of yeast organisms under effect of x-rays

Periodical : Dok. AN SSSR 98/6, 1013-1016, October 21, 1954

Abstract : The change in sterol metabolism under the effect of x-rays was investigated on a pure culture of yeast organisms Saccharomyces cerevisiae and the results obtained are tabulated. Three USSR references (1938-1945). Tables.

Institution : Academy of Sciences USSR, Institute of Microbiology

Presented by: Academician V. A. Engel'gardt, July 17, 1954

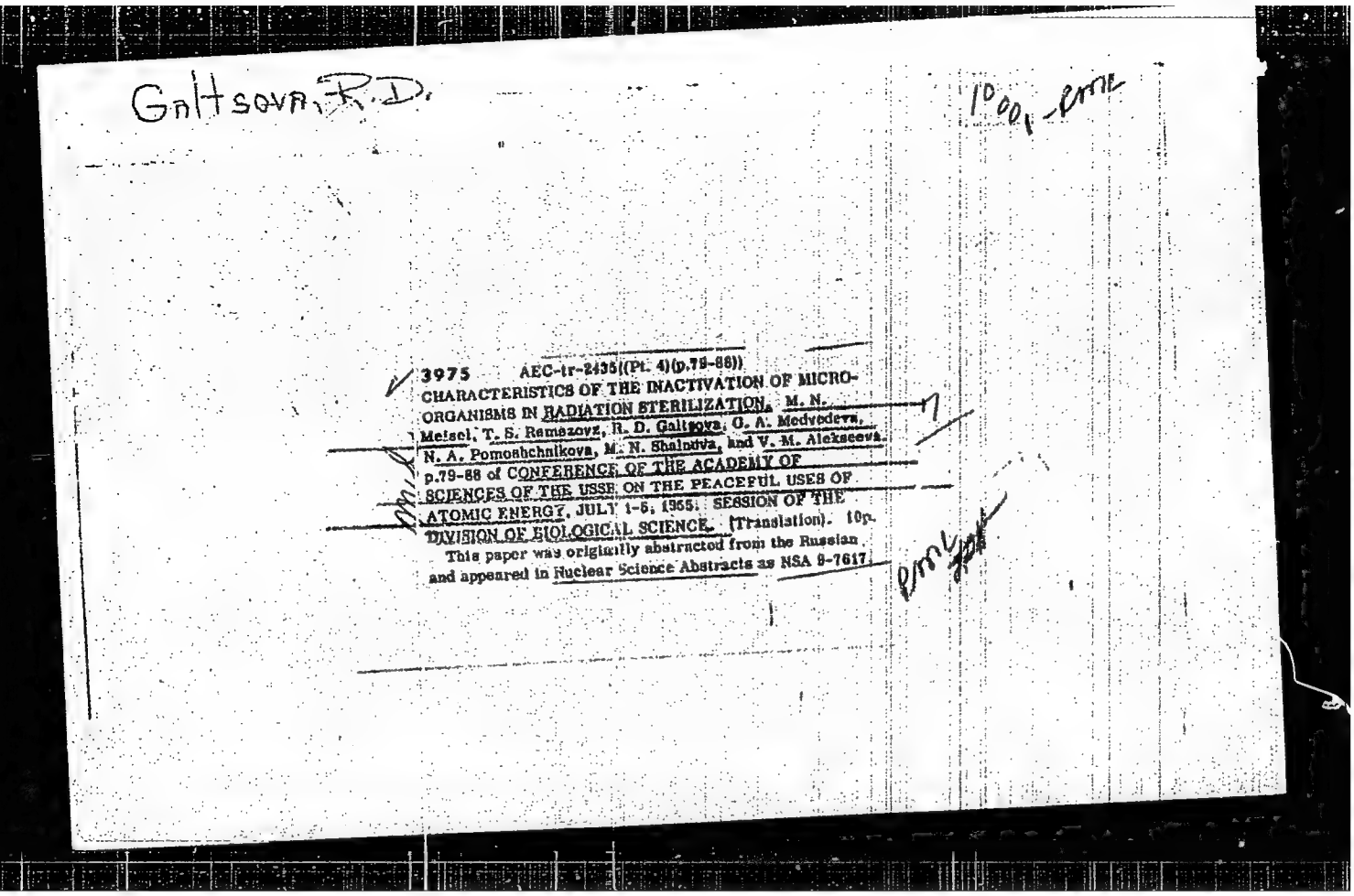
GAL'TSOVA, R.D.

"Effect of Vitamins on Biosynthetic Processes in Microorganisms, edited by A. A. Imshenetskiy, Corresponding Member, Academy of Medical Sciences USSR, Moscow, Publishing House of the Academy of Sciences USSR, 1955, 239 pp

Sum 1467

GALTSOVA, A. A., [illegible]

"On Biological Effect of Ionizing Radiations on Microorganisms," a paper presented at the Atoms for Peace Conference, Geneva, Switzerland, 1955.



Galtsova, R. D.

1000, crnl

3975 AEC-tr-2435(Pt. 4)(p.79-88))
CHARACTERISTICS OF THE INACTIVATION OF MICRO-ORGANISMS IN RADIATION STERILIZATION. M. N. Meisel, T. S. Ramazova, R. D. Galtsova, O. A. Medvedeva, N. A. Pomoshchnikova, M. N. Shalnova, and V. M. Alekseeva. p.79-88 of CONFERENCE OF THE ACADEMY OF SCIENCES OF THE USSR ON THE PEACEFUL USES OF ATOMIC ENERGY, JULY 1-5, 1955. SESSION OF THE DIVISION OF BIOLOGICAL SCIENCE. [Translation]. 10p.
This paper was originally abstracted from the Russian and appeared in Nuclear Science Abstracts as NSA 9-7617.

Galtsova, R.D.

4001 - emc

3978 AEC-tr-2436((Pt. 4)(p.107-12))
IONIZING RADIATIONS AS A STIMULANT OF ERGOSTEROL BIOSYNTHESIS. R. D. Galtsova. p.107-12 of CONFERENCE OF THE ACADEMY OF SCIENCES OF THE USSR ON THE PEACEFUL USES OF ATOMIC ENERGY, JULY 1-5, 1955. SESSION OF THE DIVISION OF BIOLOGICAL SCIENCE. (Translation). 6p.

This paper was originally abstracted from the Russian and appeared in Nuclear Science Abstracts as NSA 9-7620.

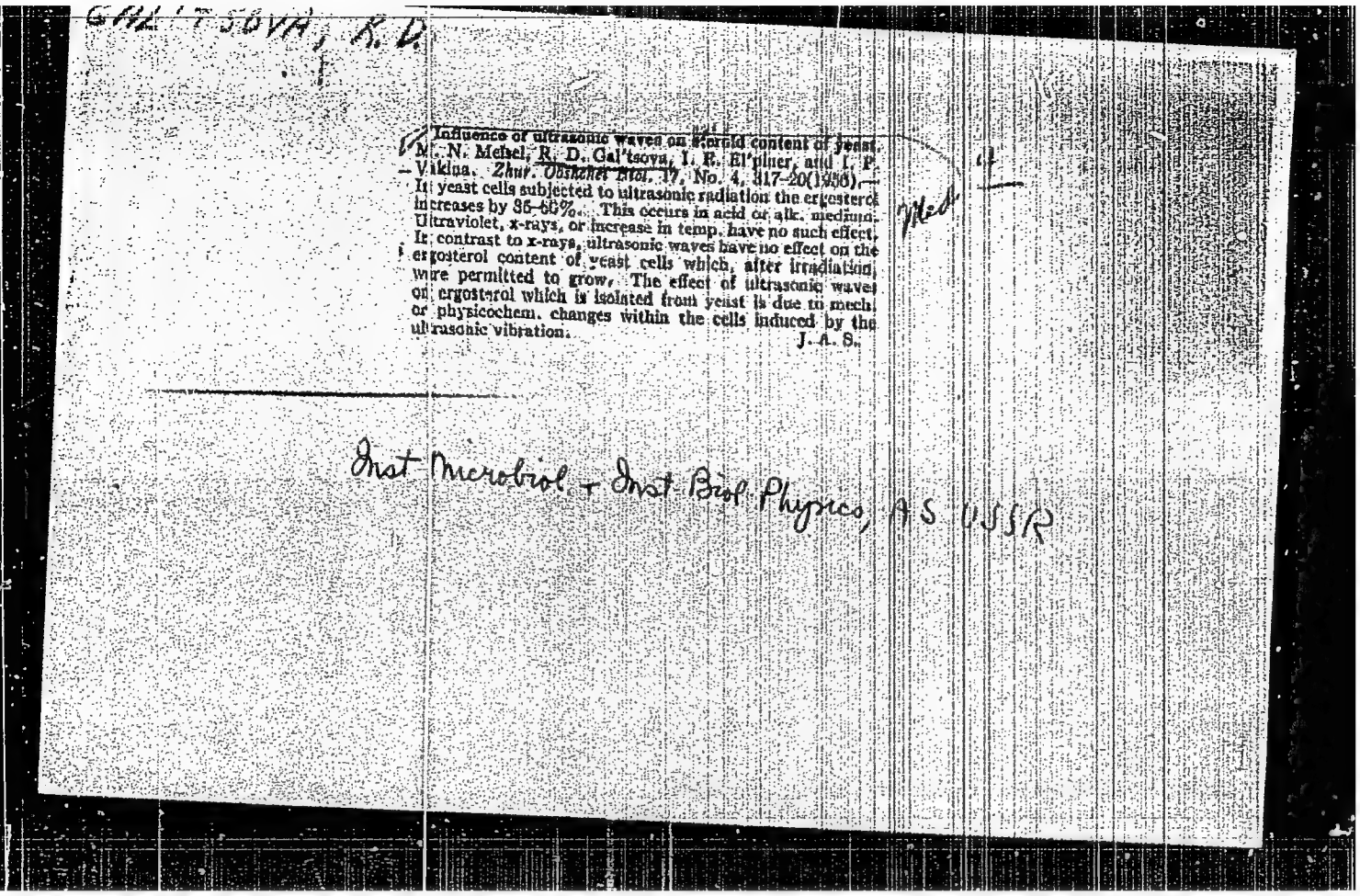
emc

GAI'TSUVA R.D

V Ionizing radiations as a stimulator of biosynthesis of ergosterol. R. D. Gal'tsova. *Sessiya Akad. Nauk S.S.S.R. po Mirnomu Ispol'zovaniyu Atomnoi Energii* 1955, *Zasedaniya Otdel. Biol. Nauk* 162-70.—Irradiation of *Saccharomyces cerevisiae* with x-rays at 20000 r./min. or 800 r./min. was examd. in respect to biosynthesis of ergosterol. At 1500–5000 r. dose differences from normal are already observed; at 90,000–100,000 r. dosage about 6% ergosterol is accumulated in the cultures at a time (4–5 days) at which the controls contain but 2%. This is a consequence of disturbed metabolism as also shown by decreased concn. of pyruvic acid in the exptl. specimens over the controls. Thus, the ergosterol synthesis is stimulated by x-radiation or subsequent reactions caused by it. G. M. Kosolapoff

GAL'TSOVA R. D.

Effects of x-rays on thiol group content in yeast cells. R. D. Gal'tsova (Inst. Microbiol., Acad. Sci. U.S.S.R., Moscow). *Mikrobiologiya* 24, 37–40(1955).—At 5000–10 000 r. growth and proliferation of yeast cells are appreciably retarded by x-ray irradiation; at 60,000 r. the effect is strong and the content of free SH rises considerably; at 120,000 r. the SH content is doubled or trebled. The increased SH content may persist through as many as 100 generations, but eventually tapers off. J. F. Smith



GAL'TSOVA, R. D.

Influence of ultrasonic waves on ergosterol content of yeast. M. N. Meisel, R. D. Gal'tsova, I. E. El'piner, and I. P. Vikina. *Zhur. Obshchei Biol.* 17, No. 4, 317-20(1956).—If yeast cells subjected to ultrasonic radiation the ergosterol increases by 35-60%. This occurs in acid or alk. medium. Ultraviolet, x-rays, or increase in temp. have no such effect. In contrast to x-rays, ultrasonic waves have no effect on the ergosterol content of yeast cells which, after irradiation, were permitted to grow. The effect of ultrasonic waves on ergosterol which is isolated from yeast is due to mech. or physicochem. changes within the cells induced by the ultrasonic vibration.

J. A. S.

Inst Microbiol + Inst Biol Physics, AS USSR

GALANOVA, E. D., POPOSHNIKOVA, E. A.

"Radio-active isotopes in the study of synthesis processes," a paper submitted at the International Conference on Radioisotopes in Scientific Research, Paris, 9-20 Sep 57.

GAL'TSOVA, R.D.

Effect of dicarboxylic amino acids on protein synthesis in Torulopsis utilis [with summary in English]. Mikrobiologiia 26 no.4:438-443 Jl-Ag '57. (MIRA 10:12)

1. Institut mikrobiologii AN SSSR, Moskva
(PROTEINS, metabolism,
Torulopsis utilis, eff. of dicarbonic amino acids on biosynthesis (Rus))
(AMINO ACIDS, effects,
dicarbonic, on Torulopsis utilis synthesis of proteins (Rus))
(CRYPTOCOCCUS,
Torulopsis utilis, eff. of dicarbonic amino acids on protein synthesis (Rus))

MEYSEL, M. N., GALTSOVA, R. D., MEDVEDEVA, G. A., POMOSHNIKOVA, N. A., SELIVERSTOVA, L. A. and SHALIMOVA, M. F.

"Action of Ionzing Radiations and Radiomimetic Substances on Microbe Cell."

paper to be presented at 2nd UN Intl.' Conf. on the peaceful uses of Atomic Energy, Geneva, 1 - 13, Sept 58.

AUTHOR: Gal'tsova, R. D., Meysel', M. N. 20-1-21/58

TITLE: The Effect of Ionizing Radiation Upon Amination, Desamination and Transamination Processes (Deystviye ioniziruyushchikh izlucheniy na protsessy aminirovaniya, dezaminirovaniya i pereaminirovaniya)

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 1, pp. 75-77 (USSR)

ABSTRACT: The authors made a special investigation of the processes of the amination of ketonic acids as well as of the desamination and transamination of amino-acids with the yeast cells, of the Saccharomyces cerevisiae after their irradiation with x-ray dosages of from 30 to 100 kiloroentgen. The yeast was investigated either immediately after irradiation or after from 24 to 48 hours growth. The amination of α ketonic acids was investigated by means of the method of M. Neber (ref. 6). The transamination of amino acids was investigated by means of the method of Braunshteyn and Kritsman (ref. 7). The experiments of the authors showed the following: immediately after the irradiation of yeast with a dosage of 60 kiloroentgen the transamination of amino-acids is only little disturbed. Only after 16-hours growth

Card 1/3

it decreases by 20% an' after 48 hours by 70-80%. With strong dosages of irr diation (100 kiloroentgen and more) the intensity of the transamination processes of amino-acids also reduces immediately after irradiation by about 50%. The desamination of amino-acids in the test samples as well as in the irradiated yeast samples were determined by means of the method of Neber (ref. 6). The desamination with irradiated cells immediately after irradiation differs only little or not at all from the reactions of the test samples. But with a further growth of the irradiated cells the desamination increases already after 16 hours (compared with the desamination in not-irradiated samples) 2-3fold and after 48 hours even more. Of the processes investigated here the amination of ketonic acids is most sensitive against irradiation. The changes in the carbon exchange of the irradiated yeast cells and its partial shift to the synthesis of fats and lipoides correlates well as regards time and quantity with the suppression of the amination process and less well with the suppression of transamination. The irradiation, in some respect, leads to the same consequences as does a lack of nitrogen in organism.

The Effect of Ionizing Radiation Upon Amination, Desamination and Transamination Processes 20-1-21/58

There are 3 tables, and 8 references, 5 of which are Slavic.

ASSOTIATION: Institute for Microbiology AN USSR (Institut mikrobiologii Akademii nauk SSSR)
PRESENTED: July 15, 1957, by V. N. Shaposhnikov, Academician
SUBMITTED: July 5, 1957

AVAILABLE: Library of Congress

Card 3/3

GAL'TSOVA, R.D.

Tricarboxylic acid cycle and the interdependence of the decomposition of carbohydrates, fats and amino acids. Uch. zap. MGPI 140:261-281 '58. (MIRA 16:8)

1. Iz laboratorii organicheskoy i biologicheskoy khimii Moskovskogo gosudarstvennogo pedagogicheskogo instituta imeni Lenina.

GAL'ISOVA, R.D.

21(4); 17(0) PHASE I BOOK EXPLOITATION SOV/2808

International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1958

Doklady sovetskikh uchenykh; radiobiologiya i radiatsionnaya meditsina (Reports of Soviet Scientists; Radiobiology and Radiation Medicine) Moscow, Izd-vo Glav. upr. po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR, 1959. 429 p. 8,000 copies printed. (Series: Vtoraya Mezhdunarodnaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii. Trudy, tom 5)

General Ed.: A.V. Lebedinskiy, Corresponding Member, USSR Academy of Medical Sciences; Ed.: Z.S. Shirokova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This book is intended for physicians, scientists, and engineers as well as for professors and students at vtuzes where radiobiology and radiation medicine are taught.

COVERAGE: This is Volume 5 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held on September 1-13, 1958, in Geneva. Volume 5 contains 32 reports edited by Candidates of Medical Sciences S.V. Levinskiy and V.V. Sedov. The reports cover problems of the biological effects of ionizing radiation, future consequences of radiation in small doses, genetic effects of radiation, treatment of radiation sickness, uses of radioactive isotopes in medical and biological research, uses of atomic energy for diagnostic and therapeutic purposes, soil absorption of uranium fission products, their intake by plants, and their storage in plants and foodstuffs. References accompany each report.

Reports of Soviet Scientists (Cont.) SOV/2808

Zeyte, I.F. The Acetylating Function of the Coenzyme A System in Radiation Sickness (Report No. 2259) 160

Mozel', Ye.P., R.D. Gal'tsova, G.A. Medvedeva, N.A. Pomoshchnikova, L.A. Seliverstova, and N.I. Shal'nova. Effect of Ionizing Radiation and of Radiomimetic Substances on the Microbe Cell (Report No. 2320) 167

Klemparskaya, N.N., and V.V. Shikhodyrov. Local Tests to Show the State of Sensitization and Autosensitization of an Irradiated Organism (Report No. 2073) 180

Bagdasarov, A.A., F.R. Vinograd-Finkel', M.O. Raushenbakh, M.P. Bogoyavlenskaya, L.I. Idel'son, V.V. Belyakova, G.M. Abdullayev, and K.Ya. Lagutina. Experience in Treating Radiation Sickness With Leukocyte and Thrombocyte Substance (Report No. 2238) 188

Lebomina, A.G., and I.B. Keirim-Markus. Experiments to Determine Maximum Permissible Thermal Neutron Flux (Report No. 2078) 196

Gordienskiy, D.N., and T.I. Ivanenko. Isotopic Method in Studying the Hormone Effect on Metabolism in Osseous Tissue (Report No. 2072) 205

Card 4/7

21

GAL'TSOVA, R.D.; NOVICHKOVA, A.T.; VAKINA, I.P.

Effect of glucose on ergosterol synthesis by yeasts. Mikrobiologiia 28 no.4:502-506 Jl-Ag '59. (MIRA 12:12)

1. Institut mikrobiologii AN SSSR.
(VITAMIN D metab.)
(GLUCOSE pharmacol.)
(YEASTS metab.)

GALTSOVA, R.D.

SESSION A—4—4 : Peroxide Formation in Biological Materials

(a)

Effect of Radiation on the Sterol Metabolism of Yeast

R. D. Galtsova

Radiat on effects cause a number of important changes in the metabolism of yeast cells. Protein and carbohydrate metabolism, amino acid synthesis and particularly sterol metabolism are affected. Ionizing radiation produces large changes in the latter, the sterol content increasing two-fold or more. The radiation-induced biosynthetic shifts of sterols are associated with impairment of the normal reaction sequence of carbohydrate metabolite intermediates.

Ionizing radiation retards the glycolytic processes leading to accumulation of intermediates that are utilized in sterol synthesis. The addition of blocking agents of carbohydrate metabolism considerably lowers sterol biosynthesis.

It is well known that radiation causes the accumulation of peroxides and oxidizing radicals in the organism. These alter the course of glycolysis and the normal conversion of intermediates, causing enhanced sterol production. Other oxidizing agents, such as methylene blue, indigo carmine, dinitrophenol, etc., have the same effect on the biosynthesis of sterols in yeast. Hydrogen peroxide is particularly active in this respect.

The irradiation-induced peroxides lower the activity of the enzymatic complex; the dehydrogenase activity of irradiated cells is much lower than that of the non-irradiated controls. Of interest is the fact that specific poisons of glycolysis (monoiodoacetic acid, Sodium fluoride) usually also bring about accumulation of sterols in the yeast protoplast.

Institute of Microbiology, Academy of Science, USSR

Report presented at the 2nd Intl. Congress of Radiation Research, Harrogate/Yorkshire, Gt. Brit., 5-11 Aug 1962

L0612

27.1220

S/220/62/031/004/001/001
I021/I215

AUTHORS: Gal'tsova, R. D. and Vakina, I. P.

TITLE: Effect of X-ray irradiation upon the content of glycogen and reducing compounds in yeasts

PERIODICAL: Mikrobiologiya v. 31, no. 4, 1962, 577–581

TEXT: This is a continuation of previous studies. Carbohydrate metabolism in irradiated yeasts was insufficiently studied until now. Sacch cerevisiae. Sacch. Frohberg carlsbergiensis and Sacch. carslbergensis 10-D. were x-irradiated with 10–200 cu at a dose rate of 800 r/min in pressed and sterile conditions, and grown on agar for 24, 48, 72 and 96 hours. Non-irradiated cells were grown under similar conditions. A very large inoculum was used. The glycogen content in the irradiated cells decreased (from 60 to 90%) in all three strains. Immediately after irradiation the glycogen content decreased only to 5-8%. An average increase of 30–35% in the content of reducing compounds was observed in the irradiated and grown yeast cells. This increase was found also in cells immediately after irradiation with 20–25 cu. Irradiation with 200 cu, resulted in an increase in reducing compounds by about 50% as compared with the controls. There are 2 figures and 3 tables.

ASSOCIATION: Institut Mikrobiologii AN SSSR (Institute of Microbiology of the AS USSR)

SUBMITTED: September 25, 1961

Card 1/1

41619

S/205/62/002/005/006/017
D268/D308

27.1220

AUTHORS: Gal'tsova, R.D., and Novichkova, A.T.

TITLE: The effect of ionizing radiations on nitrogen metabolism in yeast organisms

PERIODICAL: Radiobiologiya, v. 2, no. 5, 1962, 690 - 694

TEXT: In continuation of earlier work, the disruption of protein metabolism was investigated in pure cultures of Saccaromyces cerevisiae, S. carlsbergensis Frohberg, and S. carlsbergensis 10 D, after x ray irradiation and subsequent culturing in a wort agar suspension. There was no pronounced change in the N fraction content immediately after irradiation, except for a gradual accumulation of amino N after a dose of 30 curies. As irradiated yeasts developed, there were marked metabolic disturbances, with the general N content at times 10 - 20 % above that in non-irradiated, and remaining constant at doses of 20 - 30 curies. Protein N content also increased and irradiation seemed to stimulate protein synthesis. With higher radiation doses the general and protein N content gradually declined, and was especially pronounced at 150 - 200 curies.

Card 1/2

The effect of ionizing radiations ...

Amino N content declined slightly at comparatively low doses. The aspartic acid content increased twofold and more at a dose of 200 curies, while alanine and glutamic acid contents increased by 80 - 90 and 50 - 70 % as against the control. There was a definite correlation between free amino acid accumulation and the dose of radiation. Ionizing radiations were thus shown to produce a number of significant changes in the N metabolism of the yeast organism. There are 4 figures and 1 table.

ASSOCIATION: Institut mikrobiologii AN SSSR, Moskva (Institute of Microbiology of the AS USSR, Moscow)

SUBMITTED: February 12, 1962

Card 2/2

GAL'TSOVA, R.D.; VAKINA, I.V.

Effect of X-ray irradiation on the content of glycogen and reducing substances in yeast organisms. Mikrobiologiia 31 no.4:577-581 Jl-Ag '62. (MIRA 18:3)

1. Institut mikrobiologii AN SSSR.

MEYSEL', M.N.; REMEZOVA, T.S.; BIRYUZOVA, V.I.; GAL'TSOVA, R.D.; MEDVEDEVA, G.A.; POMOSHCHNIKOVA, N.A.; SELIVERSTOVA, L.A.; POGLAZOVA, M.N.; NOVICHKOVA, A.T.; VOLKOVA, T.M.

Cytophysiological and biochemical studies of yeasts during their recovery following radiation injury. Izv. AN SSSR. Ser. biol. no.6: 827-851 N-D '64. (MIRA 17:11)

1. Institute of Microbiology, Academy of Sciences of U.S.S.R., and Institute of Radiation and Physico-Chemical Biology, Academy of Sciences of U.S.S.R., Moscow.

[illegible], R.L.; NOVICHKOVA, A.T.; [illegible], G.I.

Sterol composition of yeast organisms. Prikl. biokhim. i mikrobiol. 1 no.3:294-298 My-Je '65. (MIRA 18:7)

1. Institut mikrobiologii AN SSSR.

GAL'TSOVA, R.D.; MEKOTS, L.M.

Effects of storage conditions of yeasts on the ergosterol content in them. Prikl. biokhim. i mikrobiol. 1 no.4:449-451 Jl-Ag '65. (MIRA 18:11)

1. Institut mikrobiologii AN SSSR.

GALSTYAN, R.D.; YAKUBA, I.P.

Factors determining sterol biosynthesis in yeast organisms.
Mikrobiologiia 33 no.3:390-396 My-Je '64. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted April 5, 1963.

GAL'TSOVA, Z.V.

Embryogeny of the ependyma of ventricles of the brain in a cat.
Dokl. AN SSSR 159 no.4:910-912 D '64 (MIRA 18:1)

1. Leningradskiy pediatricheskiy meditsinskiy institut. Predstavleno akademikom N.N. Anichkovym.

GALTYKHIN, N.M.; SLAVIN, M.B.; Prinimali uchastiye: LERNER, B.N.; SECHENOVA, R.A.

Automation of safety and control systems of heating in automated heating boilers. Nov. tekh. zhil.-kom. khoz.:Zhil. khoz. no.2: 71-85 '63. (MIRA 18:6)

GALTYKHIN, V.M.

Automatic regulation of water-heating systems with gas-burning boilers. Avtomatiz. otop. kot. no.3:78-96 '63. (MIRA 16:10)

1. Akademiya kommunal'nogo khozyaystva.
(Automatic control) (Boilers)

GALTYKHIN, V.M.

Electronic methods for monitoring the burning of a gas fuel in heating units. Gaz. delo no.9:33-36 '64.

(MIRA 17:11)

1. Akademiya kommunal'nogo khozyaystva im. K.D. Pamfilova.

GAL'TSOVA, Z.V. (Leningrad, L-188, ul.Zaytseva, 34, kv.8)

Structure of the commissure of the fornix cerebri and its intraorgan arteries, crura of the fornix and hippocampal fimbria. Arkh. anat., gist. i embr. 46 no.2:60-65 F '64. (MIRA 17:12)

1. Kafedra normal'noy anatomii (zav. - prof. A.V.Shilova) Leningradskogo pediatricheskogo meditsinskogo instituta.

WOLFSHAUT, C.; IONESCU, D.; CRISTOVEANU, Ana; STROE, Emilia; BUSILA, Eugenia; SAVESCU, Gh.; GALU, Sanda; MITRACHE, Ludmila.

Problems concerning a case of hyperadrenocorticism. Stud. cercet. endocr. 13 no.5:699-702 '62.

(ADRENAL CORTEX HYPERFUNCTION) (ADRENOGENITAL SYNDROME)

GALUBA, Danuta; ZALEWSKI, Tadeusz

Clinical picture of acute non-inflammatory renal failure in children. Pediat. pol. 38 no.9:811-817 S '63.

1. Z Kliniki Terapii Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. H. Brokman.
(ACUTE RENAL FAILURE) (DIGITALIS)
(SULFAMETHOXYPYRIDAZINE)
(DYSENTERY, BACILLARY)
(ESCHERICHIA COLI INFECTIONS)

GALUBA, Danuta; ZALEWSKI, Tadeusz

Acute non-inflammatory renal failure in children. Pediat. pol. 38 no.9:853-858 S '63.

1. Z Kliniki Terapii Chorob Dzieci AM w Warszawie Kierownik: prof. dr med. H. Brokman.
(ACUTE RENAL FAILURE)

20861
P/044/60/000/009/001/005
A107/A126

27.5200 1080

AUTHOR: Galubińska, K., Master

TITLE: Psychological testing of air force personnel

PERIODICAL: Wojskowy Przegląd Lotniczy, no. 9, 1960, 34 - 42

TEXT: Emphasizing the importance of psychological tests in general and especially in the Air Force the author treats some testing methods employed in the Polish Air Force. The purpose of the tests is to investigate the mental, physical and character qualities of the pilots. The program includes discussions, tests in writing and on proper devices, with which the physical reaction is measured. The psychological test according to Raven is described and shown in Figure 1. The intelligence test consists in questions and answers. The memory and visual observation abilities are tested by the "Teren" test, developed by E. Debicka, and shown in Figure 2. The orientation ability is tested with geometric figures (Fig. 3) and by the test according to Thurston (Fig. 4). Quickness and exactness of observation and spotting can be tested by various methods contained in the Polish edition "Collection of Aviation Tasks" by K. Golubinska. Observation and orientation ability, attentiveness, mastering of emotions, etc, are tested by a

Card 1/4

20861
P/044/60/000/009/001/005
A107/A126

Psychological testing of air force personnel

special but unspecified device working with an exactness up to 0.01 sec, and by various unspecified devices controlling motions, skillness, etc. The test results are classified in 5 degrees. To get proper results the personnel tested must be cooperative. There are 5 figures.

Card 2/4

P/043/62/000/002/003/008
I004/I204

AUTHORS: Dziuk, Zbigniew and Galubińska, Krystyna

TITLE: Certain problems of selection and training of cosmonauts

PERIODICAL: Astronautyka, no.2,1962, 10 - 12

TEXT: The Soviet and U.S. requirements in the selection and training of astronauts are similar. The psychological criteria include high level adaptability in training, motivation, intellectual ability, maturity, emotional stability, and self confidence. The astronaut's selection program is designed to select individuals who have the greatest probability of success. Motivation is considered as one of the main factors which help the cosmonaut to overcome the effects of high acceleration, weightlessness, noise, and isolation. Motivation is most closely connected with frustration, which may be due to insufficient fulfillment of the basic needs. Frustration is accompanied by excessive emotional excitability, aggressivness, breakdowns, and depressions. These states obviously decrease the efficiency of the cosmonaut. The training program includes general physical training aimed at increasing the cosmonaut's unspecific

Card 1/2

P/048/62/000/002/003/008
I004/I204

Certain problems of selection...

resistance toward accelerations, insufficient oxygen supply, vibrations, radiation, overheating and overcooling. Special coaching on different cosmic flight simulators is included. There are 5 figures.

Card 2/2

P/048/62/000/002/003/008
I004/I204

AUTHOR: Galubińska, Krystyna

TITLE: Psychological problems of manned space flights

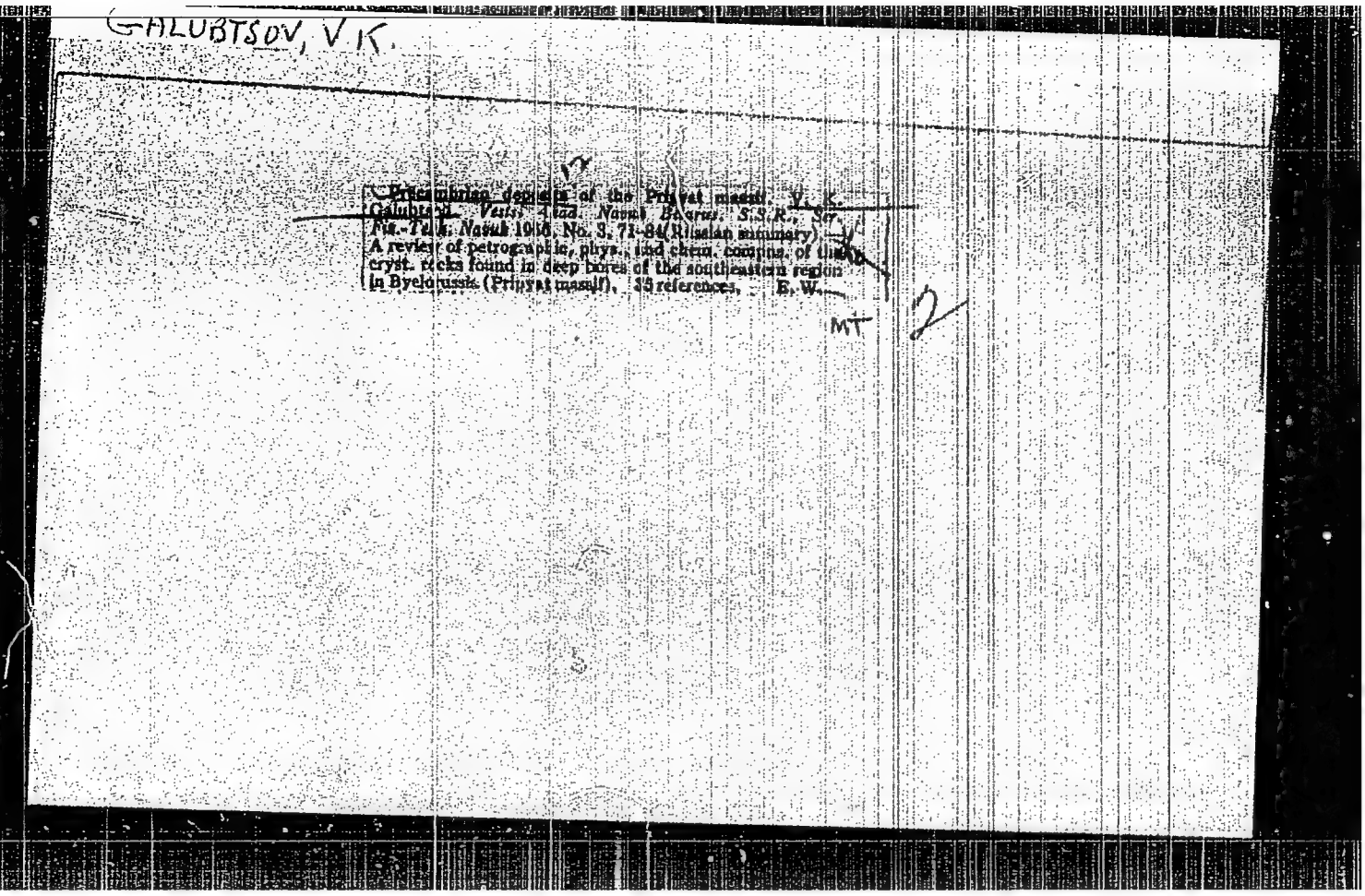
PERIODICAL: Astronautyka, no.2, 1962, 34-36

TEXT: The branch of psychology which deals with cosmic flight explains the stresses on the emotional and mental processes and establishes methods of training to increase the adaptation to cosmic flights. Factors include acceleration, high temperature, vibration, noise, weightlessness, prolonged isolation, monotony, risk and hazard. The requirements comprise general intelligence, flexibility, emotional stability, and motivation. Isolation is considered the main problem of cosmic flight together with sensory deprivation and a prolonged stay in a state of danger. Gagarin and Titov listened to their favorite tunes to diminish their feeling of loneliness. Research should also be directed toward the problem of coexistence of a group confined in a small space. The preparatory training should teach the cosmonaut to divert his feeling of fear toward the liquidation of the sources of danger.

Card 1/1

GALUBTSOV, V.K.

Lower Carboniferous deposits in the region of Slovechno.
Vestsi AN BSSR no.2:118-123 Mr-Ap '54. (MLRA 8:9)
(Slovechno District--Geology, Stratigraphic)



GALUBTSOV, V K.

Precambrian deposits of the Pripyat massif. V. K. Galubtsov. *Vestsi Akad. Navuk Belarus. SSR, Ser. Fiz.-Tekh. Navuk* 1956, No. 3, 71-84 (Russian summary). A review of petrographic, phys., and chem. compns. of the cryst. rocks found in deep bores of the southeastern region in Byelorussia (Pripyat massif). 35 references. E. W.

MT

MAKHNACH, A.S.; KURACHKA, V.P.; GALUBTSOU, V.K. [Halubtsou, V.K.]; UR"YEU, I.I.; KEDA, G.I. [Keda, H.I.]; KORZUN, V.P.

Devonian formations of the Strelichevo plateau in the Pripet Depression. Vestsi AN BSSR.Ser.fiz.-tekh.nav. no.1:84-94 '62. (MIRA 16:9)

(Pripet Valley--Geology, Stratigraphic)

KRICHMAR, S.I.; GALUCHKO, V.P.

Reaction products in electrochemical polishing of copper in H_3PO_4. Zhur.neorg.khim. 1 no.10:2422-2424 O '56. (MIRA 10:1)
(Polishing, Electrolytic) (Copper--Electrometallurgy)

TOCHERNIKOVA, K.A.; GALIMOVA, A.Ye.

Increasing the productivity of a unit for the production of a catalyst. Neftepер. i neftekhim. no.12:21 '64. (MIRA 18:2)

1. Novokuybyshevskiy neftepererabatyvayushchiy zavod.

GALUNINA, Z. I.

Gor'kovsk Inst. Epidemiology and Microbiology, (-1944-)

"The diagnosis of gas gangrene."

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 9, 1944.

GALUNINA, Z.I.; YURCHENKOVA, A.G.

Efficacy of antibiotics in the prevention of scarlet fever. Zhur. mikrobiol.epid.i immun. no.3:23-25 Mr '54. (MLRA 7:4)

1. Iz Gor'kovskogo instituta epidemiologii i mikrobiologii (direktor A.N.Meshalova) i sanitarno-epidemiologicheskoy stantsii Sverdlovskogo rayona g. Gor'kogo (glavnyy vrach S.I.TSareva).
(Antibiotics) (Scarlet fever)

GALUNINA, Z.I.

Variability of bacteria and diagnosis of infections; role of variability of the causative agent in the diagnosis of diphtheria; author's abstract. Zhur.mikrobiol.epid.i immun. no.8:84-85 Ag '54. (MLRA 7:9)

1. Iz Gor'kovskogo nauchno-issledovatel'skogo instituta vaktsin i syvorotok (dir. A.A.Golubev, nauchnyy rukovoditel' prof. F.T.Grinbaum)
(CORYNEBACTERIUM DIPHTHERIAE,
variability, role in diag. of diphtheria)
(DIPHTHERIA, diagnosis,
role of variability of Corynebacterium diphtheriae)

GALUNINA, Z.I.

Determination of the toxigenicity of diphtheria cultures in dense nutrient media. Lab. delo 6 no.4:47 Jl-Ag '60. (MIRA 13:12)

1. Gor'kovskiy institut epidemiolgoii i gigiyeny.
(BACTERIOLOGY--CULTURES AND CULTURE MEDIA) (DIPHTHERIA)

GALUNINA, Z.I.; SHEFTEL', L.M.

Cytotoxic action of the diphtherial toxin on a tissue culture. Report No. 1. Zhur.mikrobiol., epid.i immun. 33 no.8:126 Ag '62. (MIRA 15:10)

1. Iz Gor'kovskogo instituta epidemiologii i mikrobiologii.
(DIPHTHERIA) (TOXINS AND ANTITOXINS)

MALYSHEVA, E.F.; GALUNINA, Z.I.

Carriers of diphtherial microbes and their relation to diphtheria incidence. Vop.okh.mat.i det. 8 no.3:87 Mr '63. (MIRA 16:5)

1. Iz Gor'kovskogo instituta epidemiologii i mikrobiologii i laboratorii Rayonnoy sanitarno-epidemiologicheskoy stantsii.
(DIPHTHERIA—MICROBIOLOGY)

GALUNINA, Z.I.; SHEFTEL', L.M.

Use of tissue culture in diphtheria diagnosis; annotation.
Zhur. mikrobiol., epid. i immun. 40 no.4:54-55 Ap '63.
(MIRA 17:5)

1. Iz Gor'kovskogo instituta epidemiologii i mikrobiologii.

GALUNINA, Z.I.

Determination of the toxigenicity of diphtheria bacteria in tissue culture. Lab. delo 10 no.3:176-178 '64. (MIRA 17:5)

1. Gor'kovskiy institut epidemiologii i mikrobiologii.

1. GALUNOV, A.

2. USSR (600)

4. Russian Literature - History and Criticism

7. New necessary subject; N. Volkov's novel "Our own." Reviewed by A. Galunov and others. Sib.ogni 31 no. 5, 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

GALUNOV, D. P.

86-58-4-4/27

AUTHOR: Galunov, D. P., Maj Gen of the Air Force

TITLE: Instruction in Flight Discipline (Vospitaniye distsipliny poleta)
1. Developing the Qualities of Pilots in Schools (1. Formirovaniye kachestv letchika v uchilishche)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 4, pp 17-22 (USSR)

ABSTRACT: The author deals with the problem of how to develop the necessary qualities of pilots in flying schools. He states that one of the essential prerequisites for the successful solution of important and responsible tasks of the Soviet Air Force is high military discipline. To this end, future pilots from the very first day of their arrival at the flying schools should be instructed continuously in strict observance of all requirements of the flying service. Very much depends on the exactingness of pilot-instructors and commanders. No violations of regulations and rules should be tolerated, because practice has shown that even the smallest violations of flying service regulations may lead to grave accidents. The article contains several concrete and characteristic examples on the instruction of flight discipline.

AVAILABLE: Library of Congress

Card 1/1 1. Pilots - Training 2. Pilots - Study and teaching

GALUNOV, D.P.

86-58-5-8/38

AUTHOR: Galunov, D. P., Maj Gen of the Air Force

TITLE: Instruction in Flight Discipline (Vospitaniye distsipliny poleta)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 5, pp 17-23 (USSR)

ABSTRACT: This is the second in a series of articles on flight discipline (the first article appeared in issue 4 of this periodical in 1958). This article describes how young pilots after their arrival to the unit from flying schools should be approached by their superiors and instructed in flight discipline.

AVAILABLE: Library of Congress

1. Pilots - Training

Card 1/1

GALUNOV, D.P.

86-58-6-2/34

AUTHOR: Galunov, D. P., Maj Gen of the Air Force

TITLE: Instruction in Flight Discipline (Vospitaniye distsipliny poleta)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 6, pp. 9-15 (USSR)

ABSTRACT: This is the third in a series of articles under this title (for the previous articles see issues 4 and 5 of this periodical). This article stresses the importance of commanders' creative work and initiative in the training of their pilots. During training missions, commanders should strive to create conditions in the air which will force the pilots to display their initiative and creativeness and to seek systematically new and more perfect tactical methods. A commander, when giving a new assignment, should not simplify the flight conditions. On the contrary, he should make them complicated so that the pilots can learn how to overcome various difficulties.

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Card 1/1

L 7777-66 EWT(d)/EWP(1) IJP(c) BB/GG
ACC NR: AP5028044 SOURCE CODE: UR/0046/65/011/004/0417/0426

AUTHOR: Galunov, V.I.; Chistovich, L.A.

ORG: Institute of Physiology im. I.P. Pavlov, AN SSSR, Leningrad (Institut fiziologii AN SSSR)

TITLE: The relationship between motor theory and the general problem of speech recognition

SOURCE: Akusticheskiy zhurnal, v. 11, no. 4, 1965, 417-426

TOPIC TAGS: motor theory, speech recognition, speech perception, human physiology

ABSTRACT: Lately, speech investigations have been concentrating attention on the so-called motor theory of perception. This theory has both adherents and opponents. There is some experimental data accumulated in favor of the motor theory. Unfortunately, there is still no investigation of the motor theory in the framework of the more general model of speech perception. The present review article attempts to investigate a sufficiently general model of the process of speech perception, and to formulate, on the basis of this model, a motor theory of perception. Experimental data pertaining to the motor theory are presented. Some of the opposing views are given and an attempt is made to determine the practical consequences with respect to further experimental investigation of speech perception flowing out of the motor theory.

SUB CODE: PH,GP,DP / SUBM DATE: 04Mar65 / ORIG REF: 023 / OTH REF: 027

nw
Card 1/1

UDC: 534.78

L 01922-67 EWT(d)/T/EWP(t) IJP(c) GG/BB

ACC NR: AR6029283 SOURCE CODE: UR/0044/66/000/006/V057/V057

AUTHOR: Galunov, V. I.

10 B

TITLE: Employment of psychological data in automatic pattern recognition 16

SOURCE: Ref. zh. Matematika, Abs. 6V381

REF SOURCE: Sb. Vychisl. sistemy. Vyp. 19. Novosibirsk, 1965, 77-80.

TOPIC TAGS: identification, automatic identification, image

ABSTRACT: Pattern recognition is interpreted as a problem of segregation of useful elements which provide an opportunity for an abbreviated (as compared to input) description, retaining the main identifying properties. The employment of human perception (for instance in speech recognition) based on already developed psychological charts is proposed for the segregation of useful elements. Orig. art. has: a bibliography of 4 reference items. V. Sh. [Translation of abstract.]

[AM]

SUB CODE: 12, 05/

Card 1/1 hs UDC: 51.681.14:155

GALUNOVA, A.P.

TROITSKIY, S.A., doktor meditsinskikh nauk; GALUNOVA, A.P. (Gor'kiy)

Volume and diameter of erythrocytes in toxipathic hepatitis. Klin. med. 34 no.4:90 Ap '56. (MLRA 10:1)

1. Iz klinicheskogo otdela (zav. S.I.Ashbel') Gor'kovskogo nauchno-issledovatel'skogo instituta gigiyeny turda i professional'nykh zabolevaniy.

(ERYTHROCYTES) (LIVER--DISEASES)

GALUNOVA, Z.P.; GUDANOVA, N.P.; LAHETSKAYA, I.G.; BARZAKOVSKIY, V.P., doktor khim. nauk, red.; KUTASOVA, E.I., red.

[Bibliographical index of the work of the research co-workers of the I.V.Grebenshchikov Institute of the Chemistry of Silicates of the Academy of Sciences of the U.S.S.R., 1948-1961] Bibliograficheskii ukazatel' rabot nauchnykh sotrudnikov Instituta khimii silikatov im. I.V. Grebenshchikova AN SSSR 1948-1961 gg. Leningrad, AN SSSR 1963. 168 p. (MIRA 17:1)

1. Akademiya nauk SSSR. Institut khimii silikatov.

GALUNSKAYA, Viktoriya Andreyevna; VOLOSHIN, D.A., redaktor

[For the expansion of fruit culture in the northwestern zone; a bibliography] Za rasshirenie sadovodstva v severo-zapadnoi zone; rekomendatel'nyi spisok literatury. Leningrad, 1957. 20 p.
(Bibliography—Fruit culture) (MLRA 10:3)

GALUS, Z.

Preparation of pure crystalline sodium hydrogen sulfide. Eugeniusz Michalski, Ryszard Grochowski, and Zbigniew Galus (Univ. Łódź, Poland). *Zeszyty Nauk. Univ. Łódz., Ser. II, Nauki Mat.-Przyrod.* No. 3, 125–32(1957)(English and Russian summaries).—$Ca(OH)_2$ (120 g.) of 70% purity was added to a suspension of 1 kg. Na_2S of 61% purity in 3 kg. H_2O. The mixt. at 95° was sttd. with H_2S flowing at 16 l./hr. and was cooled to 50° when the Na_2S was dissolved. H_2S addn. was stopped when the pH became nearly const. Pale yellow $NaHS.3H_2O$ contg. 50.8% NaHS crystd. at 27°.

J. Stecki

GALUS, Z.

5

Amperometric determination of calcium with the aid of one and two indicator electrodes. Eugeniusz Michalski and Zbigniew Galus (Univ. Łódź, Poland). *Chem. Anal.* (Warsaw) 3, 481–9(1958)(English summary).—A method for detg. Ca and Ca + Mg in limestone with the aid of one and two indicator electrodes is described. The end point of titration was detd.: (*a*) amperometrically without supplying any external e.m.f.; the elec. system consisted of an indicator electrode made of Pt (4 mm. long and 0.5 mm. in diam.) and a reference electrode Hg/Hg_2SO_4, *N* H_2SO_4 connected to a galvanometer with a sensitivity of 8×10^{-9} amp./mm./m. and (*b*) by dead stop method with 2 indicator electrodes. *Determination of calcium.* To two 20 ml. neutral samples contg. 60–100 mg. Ca, add 4 g. NH_4Cl; after dissolution add to one of them 6 ml. 96% EtOH and titrate with 0.2*N* $K_4Fe(CN)_6$ (preliminary titration). To the other add EtOH in amts. calcd. from the preliminary titration. $A = (20 + a)2.63$, *a* being vol. $K_4Fe(CN)_6$ in ml. Titrate the sample with 0.2*N* $K_4Fe(CN)_6$. A series of Ca analyses contg. about 60, 80 and 100 mg. were made. The mean error of detn. varied from 0.44 to −0.46%. Titration of 0.2*N* Mg soln. with $K_4Fe(CN)_6$ gave results about 1% higher than theoretical. *Determination of Ca + Mg in limestone.* To about 5.2 g. limestone add HCl and heat to dissolution. Dil. the soln. contg. SiO_2 with H_2O to 200 ml., add a few drops of methyl orange, and dropwise NH_4 with stirring. Filter and wash ppt. with NH_4Cl soln., redissolve, and reppt. with NH_3. Add to the filtrates H_2O to make 500 ml. Further procedure as above. The contents of Ca in limestone were: 38.77, 37.1, and 37.8%; those of Ca + Mg, recalcd. to CaO, detd. by amperometric, complexometric, and gravimetric methods were: 54.88, 55.13, 55.03; 53.85, 53.92, 53.77; 54.23%, 53.38% and 54.43%.

Z. Kurtyka

KEMULA,W.; GALUS,Z.; KUBLIK,Z.

A new voltammetric method of investigation of the formation of intermetallic compounds using the hanging mercury electrode.
Bul Ac Pol chim 6 no.10:661-668 '58. (KRAI 9:6)

1. Institute of Physical Chemistry, Polish Academy of Sciences. Communicated by W. Kemula.
(Chemical compounds) (Voltammetry)
(Electrodes, Mercury)

GALUS, Zbigniew

Wiktor Kemula, Zbigniew GALUS, Zenon Kublik, "Application of the Hanging Mercury Drop Electrode to an Investigation of Intermetallic Compounds in Mercury, Nature, Vol. 182, No. 4644, 1 Nov 58, pp 1228-29.

Published from the Inst. of Physical Chemistry, Polish Academy of Sciences. Received 1 Sep 58.

KEMULA, W.; GALUS, Z.

The application of the "hanging drop" method to the evaluation of the composition of intermetallic compounds in mercury. Bul Ac Pol chim 7 no.8:553-557 '59. (EEAI 10:4)

1. Department of Inorganic Chemistry, Warsaw University, Presented by W.Kemula.
(Chemical compounds) (Mercury) (Electrolytes)
(Electrodes) (Polarograph and polarography)

KEMULA,W.; GALUS,Z.; KUBLIK,Z.

Investigation on the influence of platinum in mercury electrodes on certain electrode processes. Bul Ac Pol chim 7 no.10:723-728 '59. (EEAI 9:6)

1. Institute of Physical Chemistry, Polish Academy of Sciences. Department of Inorganic Chemistry, Warsaw University. Communicated by W.Kemula.

(Electrodes) (Amalgams) (Platinum) (Mercury)

KEMULA, W.; GALUS, Z.

Application of the hanging mercury drop method to the study of formation of some metal amalgams. Bul Ac Pol chim 7 no.10:729-735 '59. (KRAI 9:6)

1.Department of Inorganic Chemistry, Warsaw University. Communicated by W.Kemula.

(Amalgams) (Electrodes) (Mercury)
(Iron) (Nickel) (Cobalt)

GALUS, Z.

1

The influence of gold in a mercury electrode on some electrode processes. Wiktor Kemula, Zbigniew Galus, and Zenon Kublik (Univ. Warsaw). *Rocznik Chem.* 33, 1431-41 (1959)(English summary).—The often used electrode with small Hg drops on Au or Au-plated Pt wires is an amalgam (I) electrode and can influence the processes by formation of intermetallic compds. The surface concn. of Au was evaluated for Hg drops of 0.05 cm., and Au wires of 0.01 and 0.005 cm. radius and I were prepd. Pronounced effect of Au on Zn electrode processes was observed, starting with 0.001% Au in I. The relatively stable compd. $AuZn_3$ was formed and was not oxidized at the reversible Zn potential. The effect on Cd was less significant. The technique of prepn. of hanging Hg drop electrodes (*CA* 53, 21374e) is recommended to avoid errors due to the above processes. A. Kręglewski

~~ZBIGNIEW G.~~
GALUS, ZBIGNIEW

4

Influence of platinum in mercury on the mechanism of electrode reactions at the mercury electrode. Wiktor Kemula, Zenon Kublik, and Zbigniew Galus (Polish Acad. of Sci., Warsaw). *Nature* 184, Suppl. No. 23, 1796-6 (1959).—A hanging Hg drop electrode and a Hg-plated Pt sphere of identical diameter, immersed in the same solns., were polarized cyclically; or, after a concg. electrolysis, an anodic oxidn. curve was recorded. Aq. solns. of salts of Tl, Pb, Sn, Sb, Cd, and Zn were studied. With Zn, Sb, and Sn, significant differences were observed. Thus, oxidn. of Zn was completely inhibited at the Hg-plated Pt electrode. It is proposed that the Zn (or Sb or Sn) formed an intermetallic compd. with Pt in the Pt amalgam. This compd. could be oxidized at more pos. potentials than the Hg oxidn. potential. Cd and traces of Pb were sepd. from Zn more effectively with the Hg-plated Pt electrode, because the thinner Hg film reduced the time required for oxidn.

Martin Allen

GALUS. 2.

Influence of gold in a mercury electrode on certain electrode processes. Wiktor Kemula, Zenon Kublik, and Zbigniew Galus (Polish Acad. Sci., Warsaw). *Nature* 184, No. 4688 56–7(1959).—The electropos. potential of a Au wire for a hanging-Hg microelectrode can lead to erratic results, if the formation of intermetallic compds. is neglected. The influence of Au decreased with elapsed time after the 1st drop was suspended from the electrode. It could be neglected only if the Au concn. in the resulting amalgam was <0.001%.

Walter R. Averett

Card 1/1 glit

4

KEMULA, Wiktor; GALUS, Zbigniew

Application of a hanging mercury-drop electrode to the investigation of properties of complex amalgams. Rocz chemii 34 no.1:251-266 '60. (EEAI 10:9)

1. Department of Inorganic Chemistry, University, Warsaw.

(Electrodes, Dropping mercury) (Amalgams)

KEMULA, Wiktor, GALUS, Zbigniew

Application of the fixed hanging mercury drop electrode to research on the $Mn^{++}/Mn(Hg)$ system. Rocz chemii 36 no.7/8: 1223-1238 '62.

1. Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw.

GALUS, Z.

Relations between equations describing electrode processes associated with chemical reactions. Bul chim PAN 13 no.1: 63-65 '65.

1. Department of Inorganic Chemistry of Warsaw University. Submitted November 16, 1964.